

**Max. Marks: 4**

## Questions: 1

**Q.1** Let  $f$  be a real polynomial of degree  $n$  such that  $f(x) = f'(x)f''(x)$ , for all  $x \in \mathbb{R}$ . If  $f(0) = 0$ , then  $36(f'(2) + f''(2) + \int_0^2 f(x) dx)$  is equal to:

(1) 42      (2) 46      (3) 56      (4) 66

Scan or tap for the full solution 

[illegible]